Remarks

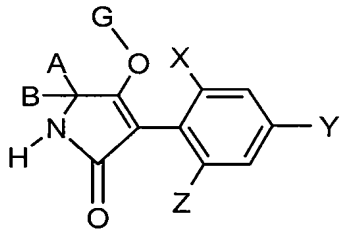
Reconsideration of this Application is respectfully requested.

Claims 2-6, 8, 9, 11-15 and 17-19 are pending in the application, with claims 2, 17, 18 and 19 being the independent claims.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

I. Description of the Invention

The present invention relates to novel 2-halo-6-alkylphenyl-substituted tetramic acid derivatives of formula (I),



(I),

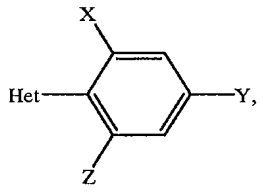
to a plurality of processes and intermediates for their preparation and to their use as pesticides and/or herbicides. The invention also relates to novel selective herbicidal active compound combinations compounds of formula (I) and at least one crop plant compatibility improving compound for use in the selective control of weeds in crops of useful plants.

II. Double Patenting

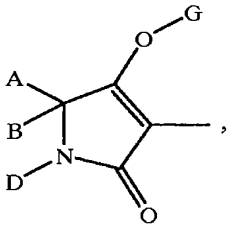
A. U.S. Patent No. 5,994,274

The rejection of claims 2-6, 8, 9 and 11 as allegedly being unpatentable on the ground of obviousness-type double patenting over claims 1-9 of U.S. Patent No. 5,994,274 ("the '274 patent") is respectfully traversed.

The claims of the '274 patent are directed to compounds of formula (I)



wherein X is alkyl, Y can be halogen or alkyl, Z can be halogen or alkyl, Het is



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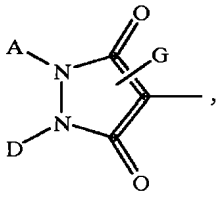
or



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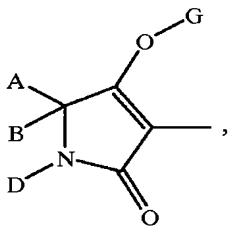
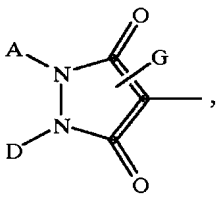
and A and B are separately substituted, or A and B together with the carbon atom to which they are bonded, represent a saturated or unsaturated, optionally substituted carbocycle or heterocycle. The claims of the present invention, in contrast, recite a much smaller genus of compounds wherein A and B together with the carbon atom to which they are attached represent a saturated C_6-cycloalkyl in which optionally the third methylene group is replaced by oxygen and which is optionally substituted by C_1-C_6-alkoxy.

In the Office Action, the Office quotes the M.P.E.P. guidelines for determining obviousness of species when prior art teaches a genus and states that "an analogous guideline was followed here for the analysis of obviousness-type double patenting." Office Action, p. 3. According to the M.P.E.P. and the cases cited therein, in order to establish a *prima facie* case of obviousness of a species any teachings of a "typical," "preferred," or "optimum" species or subgenus within the disclosed genus should be considered. M.P.E.P. § 2144.08.II.A.4(c). The M.P.E.P. further states that "[i]n making an obviousness determination, Office personnel should consider the number of variables which must be selected or modified, and the nature and significance of the differences between the prior art and the claimed invention." M.P.E.P. § 2144.08.II.A.4(c).

Claim 1 of the '274 patent recites a very broad genus of compounds. Claims 2, 3 and 4 each recite a sub-genus that is progressively narrower than the genus recited in claim 1. However, even the narrowest sub-genus recited in claim 4 is directed to a very large group of compounds wherein X represents methyl, ethyl, n-propyl or iso-propyl, Y represents fluorine, chlorine, bromine, methyl, ethyl, n-propyl or iso-propyl, Z represents fluorine, chlorine, bromine, methyl, ethyl, n-propyl or iso-propyl, Het represents



or



and A, B, D and G represent a large number of possible substituents. Therefore, even the narrowest dependent claims of the '274 patent are much broader than the present claims.

Applicants therefore submit that the claims of the '274 patent do not point a person of ordinary skill in the art to a "typical," "preferred," or "optimum" species or subgenus that would lead one of skill in the art to the subject matter of the present claims. Furthermore, even the narrowest claims of the '274 patent contain a large number of variables that must be appropriately selected in order to arrive at the claimed compounds of the present invention. Applicants respectfully submit that the Office is employing impermissible hindsight in picking the appropriate variables from among the numerous choices in the compounds claimed in the '274 patent in order to arrive at the compounds of the present invention.

Applicants further respectfully disagree with the Office's statement that "[c]ompounds of this formula anticipate compounds of the instant claims." Office Action, p. 5. It appears that the Office is incorrectly concluding that the large genus of compounds recited in the '274 patent anticipate a much smaller genus of compounds recited in the instant claims. However, the M.P.E.P. and the caselaw cited therein do not support this conclusion. For example, for a genus to anticipate a species, one of ordinary skill in the art must be able to "at once envisage" the specific compound within the generic chemical formula. "One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be 'at once envisaged.'" M.P.E.P. § 2131.02.

The claims of the '274 patent recite a *broad genus of compounds that encompass thousands of compounds*. In contrast, the claims of the present application are directed to a much smaller sub-genus. The claims of the '274 patent are too broad for a person of ordinary skill in the art to "at once envisage" the sub-genus of claimed compounds in the

present invention. The claims of the '274 patent therefore do not anticipate the claims of the present invention.

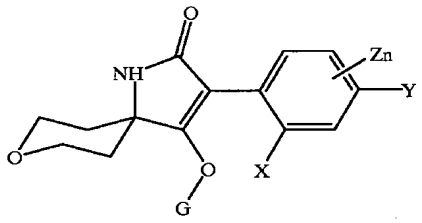
Even assuming that the claims of the present invention are obvious in view of the claims of the '274 patent, which they are not, the unexpected herbicidal action exhibited by the claimed compounds is sufficient to overcome any *prima facie* case of obviousness. Applicants reiterate the arguments presented in Applicants' Amendment and Reply of April 3, 2009, and the Declaration under 37 C.F.R. § 1.132 ("Declaration") submitted therein. In the Declaration, chemist Dr. Heinz Kehne, an inventor of the above-identified application, recites data from pre and post emergence herbicidal action of the compounds of the present invention to compounds from European Patent Publication No 0835243 (patent family member equivalent to the '274 patent). The results therein illustrate that a compound of the present invention with an ethyl group at the Z position were far more superior to the compounds from the '274 patent even at lower levels of application. Kehne's Declaration, pages 3-8. Specifically, compound 1-a-4 of the present invention has 100% efficacy in the destruction of Setvi, Avefa and Alomy weeds at an application rate of 80 g/ha when compared to a 100% efficacy of compounds from Fischer applied at a rate of 250 g/ha. *Id.*, at page 5. A second illustrative compound, 1-c-3, also demonstrates an efficacy of 100% in the destruction of Setvi, Avefa and Alomy weeds at an application rate of 80 g/ha when compared to and efficacy of 60%, 30% and 70%, in each of the weeds respectively, of compounds from Fischer applied at a rate of 250 g/ha. *Id.*, at page 6.

Applicants respectfully request that this rejection be withdrawn.

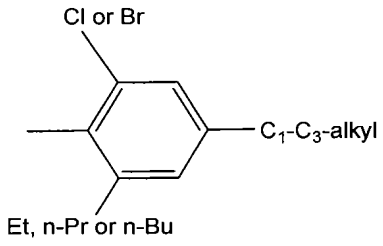
B. U.S. Patent No. 5,981,567

The rejection of claims 2-5, 8 and 9 as allegedly being unpatentable on the ground of obviousness-type double patenting over claims 1-3, 5 and 6 of U.S. Patent No. 5,981,567 ("the '567 patent") is respectfully traversed.

U.S. Patent No. 5,981,567 discloses compounds of formula



wherein X represents C_1-C_6-alkyl, halogen or C_1-C_6-alkoxy, Y represents hydrogen, C_1-C_6-alkyl, halogen or C_1-C_6-alkoxy or C_1-C_3-halogenoalkyl and Z_n represents C_1-C_6-alkyl, halogen or C_1-C_6-alkoxy and n represents 0 or 1. In contrast, the claims of the present invention are drawn to compounds of formula (I) wherein the specific substitution pattern of the phenyl radical is:



Applicants respectfully assert that the claims of the '567 patent do not render obvious the claims of the present invention. The claims of the '567 patent recite a very broad genus of compounds. Dependent claims 2-3 of the '567 patent, while reciting a

narrower sub-genus of the compounds recited in claim 1 of the '567 patent, are still significantly broader than the present claims. Accordingly, the claims of the '567 patent do not point a person of ordinary skill in the art to a "typical," "preferred," or "optimum" species or subgenus that would lead one of skill in the art to the compounds claimed in the instant application. In fact, claims 4 and 9 of U.S. Patent No. 5,981,567 are directed to specific "optimum" compounds that do not even read on the present claims and therefore point away from the compounds of the present invention. Applicants respectfully assert that the Office is employing impermissible hindsight in selecting specific substituents at the X, Y and Z positions to arrive at the claimed invention. Therefore, the claims of the '567 patent do not render obvious the claims of the instant invention.

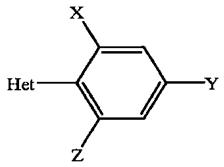
Applicants respectfully disagree with the Office's statement that "these compounds anticipate compounds of the instant claims." Office Action p. 6. The claims of the '567 patent recite a *broad genus of compounds that encompass thousands of compounds*. As discussed above, for a genus to anticipate a species, one of ordinary skill in the art must be able to "at once envisage" the specific compound within the generic chemical formula. The claims of the '567 patent are too broad for a person of ordinary skill in the art to "at once envisage" the claimed compounds of the present invention. Therefore, Applicants submit that the claims of the instant invention are not anticipated by the claims of the '567 patent.

Applicants respectfully request that this rejection be withdrawn.

C. U.S. Patent No. 6,358,887

Rejection of claims 2-5, 8 and 9 as allegedly being unpatentable on the ground of obviousness-type double patenting over claims 1-3, 6, 7, and 8 of U.S. Patent No. 6,358,887 ("the '887 patent") is respectfully traversed.

The claims of the '887 patent recite compounds of formula



wherein X, Y and Z represent a large variety of radicals.

Applicants respectfully disagree with the Office's position that the claims of the '887 patent render obvious the claims of the present invention. The claims of the '887 patent recite a very large genus of compounds. Even the narrowest sub-genus recited by dependent claim 3 is significantly broader than the instant claims. Therefore, the claims of the '887 patent do not point to a "typical," "preferred," or "optimum" species or subgenus that would point one of skill in the art to the claimed subject matter. In fact, claim 4 of the '887 patent is directed to a specific compound that does not even read on the instant claims and therefore points away from the compounds of the present invention. Further, the claims of the '887 patent do not provide adequate guidance to a person of ordinary skill in the art to select the appropriate substituents to arrive at the claimed compounds of the present invention. Therefore, the claims of the '887 patent do not render obvious the claims of the instant invention.

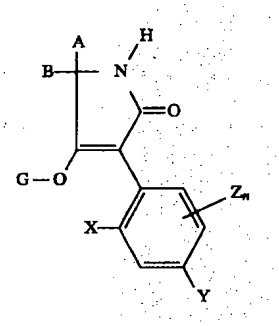
Applicants respectfully disagree with the Office's statement that compounds of this formula anticipate compounds of the instant claims. Office Action, p. 6. The claims of the '887 patent recite a large genus that encompasses thousands of compounds. In contrast, the claims of the present invention are directed to compounds with a specific substitution pattern for groups X, Y and Z, wherein X is ethyl, n-propyl or n-butyl, Y is C_1-C_3 alkyl, and Z is chloro or bromo. Therefore, the claims of the '887 patent recite a genus that is much broader than the much smaller sub-genus recited in the claims of the present invention. Following the guidelines in the M.P.E.P., the claims of the '887 patent are too broad and do not contain any guidance for a person of ordinary skill in the art to "at once envisage" the claimed compounds of the present invention. Therefore, Applicants submit that the claims of the instant invention are not anticipated by the claims of the '887 patent.

Applicants respectfully request that this rejection be withdrawn.

D. U.S. Patent No. 5,462,913

Rejection of claims 2-5, 8 and 9 as allegedly being unpatentable on the ground of obviousness-type double patenting over claims 1-6 of U.S. Patent No. 5,462,913 ("the '913 patent") on the ground of obviousness-type double patenting is respectfully traversed.

The claims of the '913 patent disclose compounds of formula



wherein X represents C_1-C_6-alkyl, halogen or C_1-C_6-alkoxy, Y represents hydrogen, C_1-C_6-alkyl, halogen or C_1-C_6-alkoxy or C_1-C_3-halogenoalkyl and Z_n represents C_1-C_6-alkyl, halogen or C_1-C_6-alkoxy, n represents 0, 1, 2 and 3. Furthermore, the A, B and the carbon atom to which they are attached represent a C_3-C_6 spirocycle which is substituted by an alkylenediyl group.

Applicants respectfully disagree with the Office's position that the claims of the '913 patent render obvious the claims of the present invention. The claims of the '913 patent are directed to a very broad general class of compounds. Dependent claims 2 and 3, while reciting a narrower sub-genus of the compounds recited in claim 1, are still significantly broader than the present claims. As such, they do not point to a "typical," "preferred," or "optimum" species or subgenus that would lead one of skill in the art to the claimed subject matter. Also, the claims of the '887 patent do not provide adequate guidance to a person of ordinary skill in the art to select the appropriate substituents to arrive at the claimed compounds of the present invention. Therefore, the claims of the '913 patent do not render obvious the claims of the instant invention.

Applicants respectfully disagree with the Office's statement that "these compounds anticipate compounds of the instant claims." Office Action, p. 7. The claims

of the '913 patent recite a large genus that encompasses thousands of compounds. In contrast, the claims of the present invention are directed to a much smaller subgenus. Following the guidelines in the M.P.E.P., the genera recited in the claims of the '913 patent are too large, and the compounds of the '913 patent have too many variables, for a person of ordinary skill in the art to "at once envisage" the claimed compounds of the present invention. Therefore, Applicants submit that the claims of the instant invention are not anticipated by the claims of the '913 patent.

Applicants respectfully request that this rejection be withdrawn.

IV. Objections to the Claims

Claims 12-15 are objected to for depending on a rejected base claim. Applicants have completely addressed the rejection of claim 2. Claims 12-15 depend directly or indirectly from claim 2. Applicants respectfully submit that objection to claims 12-15 is therefore improper and Applicants request that the objection be withdrawn.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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Date: Dec. 3, 2009

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